of NN intervals in alternation segments, wherein each alternation segments comprises a sequence of at least four NN intervals, for which heart rate acceleration changes sign every beat.

7. The method of claim **2**, further comprising:

applying the set of fragmentation indices to the data from the first set of ECG signals.

8. The method of claim **7**, further comprising:

further determining the degree of fragmentation in the first set of ECG signals based on values of the set of fragmentation indices, wherein the degree of fragmentation increases based on an increase in the values of the set of fragmentation indices.

9. The method of claim **1**, wherein analyzing data from the first set of ECG signals further comprises:

deriving, from each ECG signal, a time series of cardiac interbeat (RR) intervals, $\{RR_i\}=\{t_{R_i}-t_{R_{i-1}}\}$, wherein t_{R_i} represents the time of occurrence of the i^{th} QRS complex, and the time series of the differences between consecutive RR intervals (increments), $\{\Delta RR_i\}=\{RR_i-RR_{i-1}\}$; and

computing a set of fragmentation indices from the time series derived from each ECG signal.

10. The method of claim **9**, wherein a fragmentation index in the set of fragmentation indices comprises: a percentage of zero-crossing points in the RR time series or a percentage of inflection points (PIP) in the time series of the RR intervals.

11. The method of claim **9**, wherein a fragmentation index in the set of fragmentation indices comprises: an inverse of an average length of acceleration and deceleration RR segments ($IALS_{RR}$), wherein the acceleration and deceleration segments are sequences of RR intervals between consecutive inflection points for which the differences between two RR intervals are <0 and >0, respectively, and wherein a length of a segment is the number of RR intervals in the segment.

12. The method of claim **9**, wherein a fragmentation index in the set of fragmentation indices comprises: a percentage of short RR segments (PSS_{RR}), wherein PSS_{RR} further comprises a complement of a percentage of RR intervals in acceleration and deceleration segments with three or more RR intervals.

13. The method of claim **9**, wherein a fragmentation index in the set of fragmentation indices comprises: a percentage of RR intervals in alternation segments, wherein each alternation segments comprises a sequence of at least four RR intervals, for which heart rate acceleration changes sign every beat.

14. The method of claim **9**, further comprising:

applying the set of fragmentation indices to the data from the first set of ECG signals.

15. The method of claim **1**, further comprising:

mapping the differences between consecutive NN or RR intervals above and below given thresholds in the first set of ECG signals to at least three different symbols;

identifying different segments of consecutive symbols in the plurality of symbols as a plurality of words;

determining a plurality of word groups based on identifying for each word the number and types of transitions between different symbols;

determining percentages of each word group; and

quantifying the degree of fragmentation in the first set of ECG signals based on the percentages of each word group in the plurality of word groups.

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